

**PLAYING ONE OR MORE VIDEOS AT ONE OR MORE MOBILE PHONES
WHILE ONE OR MORE PHONE CALLS ASSOCIATED WITH THE ONE OR
MORE MOBILE PHONES ARE ON HOLD**

TECHNICAL FIELD

5 The invention relates generally to mobile telecommunications and more particularly to playing videos at mobile phones.

BACKGROUND

Many businesses today employ one or more server components to answer incoming phone calls from calling phones. The server components in one example
10 determine an intended recipient for the incoming phone calls and direct the phone calls to the intended recipient. For example, the server components attempt to connect the phone calls with employees of the business. When the employees are busy, the server components in one example place the phone calls on hold. In one example, while the phone calls are on hold, the server components play music at the calling phones for
15 enjoyment by users of the calling phones. In another example, the businesses employ the server components to advertise products, services, and/or events to the users of the mobile phones.

Many mobile phones are able to display videos for users of the mobile phones. As one shortcoming, the server components do not play videos at the mobile phones
20 while the phone calls associated with the mobile phones are on hold. As another shortcoming, the server components do not allow the users to choose the type of content that is played at the mobile phones while the phone calls associated with the mobile phones are on hold

Thus, a need exists for a server component that plays videos at one or more mobile phones on hold. A further need exists to allow callers to choose the type of content that is played at the mobile phones while on hold.

SUMMARY

5 The invention in one implementation encompasses an apparatus. The apparatus comprises one or more video server components that play one or more videos at one or more mobile phones while one or more phone calls associated with the one or more mobile phones are on hold.

Another implementation of the invention encompasses a method. One or more
10 video server components are instructed to play one or more videos at the one or more mobile phones while one or more phone calls associated with the one or more mobile phones are on hold.

A further implementation of the invention encompasses an article. The article comprises one or more computer-readable signal-bearing media. The article includes
15 means in the one or more media for instructing one or more video server components to play one or more videos at the one or more mobile phones while one or more phone calls associated with the one or more mobile phones are on hold.

DESCRIPTION OF THE DRAWINGS

Features of exemplary implementations of the invention will become apparent
20 from the description, the claims, and the accompanying drawings in which:

FIG. 1 is a representation of an exemplary implementation of an apparatus that comprises one or more mobile phones, one or more network components, one or more

interactive server components, one or more databases, and one or more video server components.

FIG. 2 is a representation of an exemplary implementation of a message flow that illustrates playing one or more videos at the mobile phones by the video server component of FIG. 1.

DETAILED DESCRIPTION

Turning to FIG. 1, the apparatus 100 in one example comprises one or more mobile phones 102, one or more network components 104 and 106, one or more interactive server components 108, one or more databases 110, and one or more video server components 112. A home or business in one example employs the interactive server component 108 to handle one or more phone calls. For example, a user 116 of the mobile phone 102 may place a phone call to the home or business. The interactive server component 108 in one example places the phone call from the mobile phone 102 on hold. While the phone call from the mobile phone 102 is on hold, the video server component 112 plays one or more videos at the mobile phone 102.

The user 116 of the mobile phone 102 in one example is a customer of the business. For example, the user 116 buys products and/or services from the business. The mobile phone 102 comprises a screen to display videos to users of the mobile phone 102. The mobile phone 102 communicates over the network components 104 and 106. For example, the mobile phone 102 can contemporaneously communicate over both the network components 104 and 106.

In one example, the user 116 employs the mobile phone 102 to place the phone call to the interactive server component 108 through the network component 104. The

network component 104 in one example comprises a voice network. For example, the network component 104 comprises a public land mobile network (“PLMN”).

In another example, the user 116 employs the mobile phone 102 to place the phone call to the interactive server component 108 through a voice over internet protocol (“VoIP”) network. For example, the voice over internet protocol network employs the network components 104 and 106. For example, the voice over internet protocol network communicates data and/or voice communications between one or more of the mobile phone 102, the interactive server component 108, and the video server component 112. The network component 106 in one example comprises a data network.

One or more of the network components 104 and 106 pass the phone call from the mobile phone 102 to the interactive server component 108. The interactive server component 108 attempts to connect the phone call with an intended recipient. If the intended recipient is unavailable, the interactive server component 108 handles the phone call. For example, the intended recipient may comprise an employee of the business associated with the interactive server component 108 and the employee may be busy. Thus, the interactive server component 108 places the phone call on hold when the employee is busy. The interactive server component 108 in one example comprises an interactive voice response (“IVR”) server component. The interactive server component 108 in one example comprises an instance of the recordable data storage medium 114.

In one example, the phone call from the mobile phone 102 comprises user information. The user information in one example comprises a caller identification of the user 116 of the mobile phone 102. In another example, the user 116 is a new customer of the business and the phone call does not contain user information. If the phone call does

not comprise user information, the interactive server component 108 requests the user information from the user 116. The user information in one example comprises one or more of a name, an address, a phone number, and other customer identifying information of the user 116. If the user 116 is a new customer, the interactive server component 108 in one example enters the user information into the database 110. If the user 116 is a returning customer of the business, the interactive server 108 in one example searches the database 110 with the user information to make a determination of one or more user preferences of the user 116 of the mobile phone 102.

The database 110 returns the user preferences to one or more of the interactive server component 108 and the video server component 112. The database 110 in one example comprises a customer relationship management (“CRM”) server component. For example, the one or more of the interactive server component 108 and the video server component 112 can search the database 110 with the call information and the user information for the user preferences of customers stored in the database 110. The database 110 in one example comprises an instance of the recordable data storage medium 114.

The video server component 112 plays the video at the mobile phone 102 for the user 116. For example, if the user 116 is a returning customer of the business, the video server component 112 plays the video at the mobile phone 102 based on the user preferences stored in the database 110. If the user 116 is a new customer of the business, the video server component 112 plays any video at the mobile phone 102. For example, the video server component 112 may play an advertisement of the business at the mobile phone 102 for the user 116. The video server component 112 comprises an instance of

the recordable data storage medium 114. In one example, the video server component 112 streams the video to the mobile phone 102 through the network component 106. In another example, the video server component 112 streams the video to the mobile phone 102 through the voice over internet protocol network.

5 The interactive server component 108 or the video server component 112 in one example sends one or more messages to the mobile phone 102. The messages in one example comprise one or more short message service messages ("SMS"). The interactive server component 108 or the video server component 112 sends the message to the mobile phone 102 to ask for permission from the user 116 to play the video at the mobile
10 phone 102. The message in one example provides a choice between a plurality of videos, such as, a first video and a second video. For example, the first video is stored at a first internet protocol address and the second video is stored at a second internet protocol address. The user 116 employs the mobile phone 102 to reply to the choice presented in the message with a selection to play either the first video or the second video. For
15 example, the user 116 presses a button or uses a voice command with the mobile phone 102 to make the choice of the first video or the second video.

 In one example, one or more of the interactive server component 108 and the video server component 112 obtain the selection from the mobile phone 102 of the first video or the second video. Upon receipt of the selection, the video server component 112
20 plays the first video or the second video through the network component 106 or the voice over internet protocol network to the mobile phone 102. For example, the video server component 112 connects the mobile phone 102 to the first internet protocol address of the first video or the second internet protocol address of the second video. In another

example, the interactive server component 108 or the video server component 112 does not provide the mobile phone 102 with a choice of videos. For example, the video server component 112 may play the video at the mobile phone 102 while the mobile phone 102 is on hold without permission from the user 116 of the mobile phone 102.

5 The user 116 employs the mobile phone 102 to watch the video. Upon an intended recipient of the phone call becoming available, the interactive server component 108 in one example sends a message to the video server component 112 to stop playing the video at the mobile phone 102. Then, the interactive server component 108 takes the phone call off hold and attempts to connect the phone call with the intended recipient.

10 Referring to FIGS. 1 and 2, an illustrative description of exemplary operation of the apparatus 100 is now presented, for explanatory purposes. Message flow 202 illustrates the video server component 112 playing one or more videos to the mobile phone 102. For example, the video server component 112 plays the videos at the mobile phone 102 while a phone call associated with the mobile phone is on hold.

15 The user 116 in one example employs the mobile phone 102 to place a phone call 204 to a home or business. For example, the network component 104 or the voice over internet protocol network passes the phone call 204 from the mobile phone 102 to the interactive server component 108 associated with the home or business. Upon receipt of the phone call 204, the interactive server component 108 obtains user information 206
20 associated with the user 116 of the mobile phone 102. In one example, the interactive server component 108 asks the user 116 of the mobile phone 102 for the user information 206. In another example, the interactive server component 108 extracts the user

information 206 from the phone call 204. Upon receipt of the user information 206, the interactive server component 108 may place the phone call on hold 208.

Also upon the receipt of the user information 206, the interactive server component 108 performs a query 210 of the database 110 with the user information 206 to make a determination of one or more user preferences 212. “QUERY WITH USER INFORMATION” in one example serves to represent the query 210 of the database 110. The database 110 passes the user preferences 212 to the interactive server component 108 or the video server component 112.

Upon receipt of the user preferences 212, the interactive server component 108 or the video server component 112 in one example sends a query message 214 through the network component 106 or the voice over internet protocol network to the user 116 of the mobile phone 102. For example, the interactive server component 108 or the video server component 112 sends the query message 214 to ask for permission from the user 116 of the mobile phone 102 to play a video 218 at the mobile phone 102. “ASK PERMISSION” in one example serves to represent the query message 214. Upon receipt of the query message 214, the user 116 in one example employs the mobile phone 102 to send a reply message 216 with the permission to play the video 218 at the mobile phone 102 through the network component 106 or the voice over internet protocol network to the interactive server component 108 or the video server component 112. “PERMISSION” in one example serves to represent the reply message 216.

Upon receipt of the reply message 216 from the mobile phone 102, the video server component 112 plays the video 218 at the mobile phone 102 through the network component 106 or the voice over internet protocol network. For example, the video

server component 112 connects the mobile phone 102 to an internet protocol address of the video 218. The user 116 in one example employs the mobile phone 102 to view the video 218.

When an intended recipient at the location of the interactive server component 108 becomes available, the interactive server component 108 in one example sends a notification 220 to the video server component 112 to end the video 218. "END VIDEO" in one example serves to represent the notification 220 to end the video 218. The interactive server component 108 in one example takes the phone call associated with the mobile phone 102 off hold 222. "OFF HOLD" in one example serves to represent the phone call off hold 222. Then, the interactive server component 108 in one example connects the phone call from the mobile phone 102 with the intended recipient.

The apparatus 100 in one example comprises a plurality of components such as one or more hardware components and one or more computer software components. A number of such components can be combined or divided in the apparatus 100. An exemplary component of the apparatus 100 employs and/or comprises a set and/or series of computer instructions written in or implemented with any of a number of programming languages, as will be appreciated by those skilled in the art.

The apparatus 100 in one example employs one or more computer-readable signal-bearing media. Examples of a computer-readable signal-bearing medium for the apparatus 100 comprise the recordable data storage medium 114 of the interactive server component 108, the database 110, and the video server component 112. For example, the computer-readable signal-bearing medium for the apparatus 100 comprises one or more of a magnetic, electrical, optical, biological, and atomic data storage medium. In one

example, the computer-readable signal-bearing medium comprises a modulated carrier signal transmitted over a network comprising or coupled with the apparatus 100, for instance, one or more of a telephone network, a local area network (“LAN”), the internet, and a wireless network.

5 The steps or operations described herein are just exemplary. There may be many variations to these steps or operations without departing from the spirit of the invention. For instance, the steps may be performed in a differing order, or steps may be added, deleted, or modified.

10 Although exemplary implementations of the invention have been depicted and described in detail herein, it will be apparent to those skilled in the relevant art that various modifications, additions, substitutions, and the like can be made without departing from the spirit of the invention and these are therefore considered to be within the scope of the invention as defined in the following claims.